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PRE-APPEAL BRIEF REQUEST FOR REVIEW		Docket Number (Optional) 43968-0003	
CERTIFICATE OF FACSIMILE TRANSMISSION UNDER 37 CFR 1.6(d) I hereby certify that this paper and the attached papers are being transmitted by facsimile to the Patent and Trademark Office, 571-273-8300, on this date: 09/09/2008 Date Typed or printed name <u>Michelle Melendez</u>		Application Number 10/700,220	Filed November 3, 2003
Signature <u>Michelle Melendez</u>		First Named Inventor Bharitkar et al.	Examiner George Monikang
Art Unit 2615			
Applicant requests review of the final rejection in the above-identified application. No amendments are being filed with this request. Response to Final Office Action and Request for Reconsideration submitted herewith. This request is being filed with a notice of appeal. X The review is requested for the reason(s) stated on the attached sheet(s). Note: No more than five (5) pages may be provided. X I am the <input type="checkbox"/> applicant/inventor. <input type="checkbox"/> assignee of record of the entire interest. See 37 CFR 3.71. Statement under 37 CFR 3.73(b) is enclosed. (Form PTO/SB/96) <input checked="" type="checkbox"/> attorney or agent of record. 55,462 Registration number <input type="checkbox"/> attorney or agent acting under 37 CFR 1.34. Registration number if acting under 37 CFR 1.34			
		Signature <u>Steven A. Moore</u> Typed or printed name (858) 450-8400 Telephone number September 9, 2008 Date	
NOTE: Signatures of all the inventors or assignees of record of the entire interest or their representative(s) are required. Submit multiple forms if more than one signature is required, see below*.			
<input checked="" type="checkbox"/> *Total of <u>1</u> forms are submitted.			

This collection of information is required by 35 U.S.C. 132. The information is required to obtain or retain a benefit by the public which is to file (and by the USPTO to process) an application. Confidentiality is governed by 35 U.S.C. 122 and 37 CFR 1.11, 1.14 and 41.6. This collection is estimated to take 12 minutes to complete, including gathering, preparing, and submitting the completed application form to the USPTO. Time will vary depending upon the individual case. Any comments on the amount of time you require to complete this form and/or suggestions for reducing this burden, should be sent to the Chief Information Officer, U.S. Patent and Trademark Office, U.S. Department of Commerce, P.O. Box 1450, Alexandria, VA 22313-1450. DO NOT SEND FEES OR COMPLETED FORMS TO THIS ADDRESS. SEND TO: Mail Stop AF, Commissioner for Patents, P.O. Box 1450, Alexandria, VA 22313-1450.

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IN THE UNITED STATES PATENT AND TRADEMARK OFFICE

Applicant(s): Bharitkar et al.

Serial No.: 10/700,220

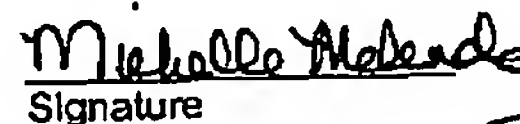
Filed: November 03, 2003

Cust. No.: 33123

For: **SYSTEM AND METHOD FOR
AUTOMATIC MULTIPLE LISTENER
ROOM ACOUSTIC CORRECTION
WITH LOW FILTER ORDERS**

Examiner: George Monikang

Art Unit: 2615

**CERTIFICATE OF FACSIMILE
TRANSMISSION UNDER 37 CFR 1.6(d)**I hereby certify that this paper and the
attached papers are being transmitted by
facsimile to the Patent and Trademark Office,
571-273-8300, on this date:09/09/2008
Date
Signature**Notice Of Appeal****&****Pre-Appeal Brief Request For Review**Commissioner for Patents
P.O. Box 1450
Alexandria, VA 22313-1450

Dear Sir:

In response to the Final Office Action mailed July 09, 2008 in connection with the above-identified application, a Notice of Appeal, a Pre-Appeal Request for Review, and accompanying statements are submitted for consideration. These documents are submitted within two months of the mailing of the Final Office Action.

U.S.S.N. 10/700,220**S. Bharitkar et al.****Notice Of Appeal & Pre-Appeal Request For Review****REMARKS**

These remarks are submitted for review and consideration during the Pre-Appeal Brief Review. Claims 1-6, 8-12, and 19-22 are pending in this continuation-in-part application and can be found in the Applicant's concurrently filed response. No other appeals or interferences exist which relate to the present application on appeal. No substantive amendments to the claims remain outstanding.

Issue

Whether the provisional obviousness type double patenting rejection to the pending claims is proper.

Argument

In the Final Office Action the Examiner states "The '644 claims 1, 5-6 are a broader recitation of the same invention claimed in '220 claim 1, 3-4." and "The '220 claim 2 is a broader recitation of the same invention claimed in '644 claims 2, 3 and 4. Therefore, '644 claims 2, 3 and 4 are encompassed by '220 claim 2. It is critical that patents issuing from these applications be commonly owned to avoid potential licensees from owing licensing fees to two different parties." Applicant respectfully disagrees and has provided charts illustrating the differences between the claims in the last two responses. Further, in making the provisional rejection the Examiner relies on U.S. Patent No. 6,072,877 (Abel) in combination with the claims to support the provisional rejection. This reliance is improper under the law. See e.g. MPEP §804 III citing *In re Bartfeld*, 925 F.2d 1450, 17 USPQ2d 1885 (Fed. Cir. 1991) and *In re Bowers*, 359 F.2d 886, 149 USPQ 570 (CCPA 1966). See also *Quad Environmental Technologies Corp. v. Union Sanitary District*, 946 F.2d 870, 20 USPQ2d 1392 (Fed. Cir. 1991). Relevant text provided in the Response to Final Office Action.

Issue

Whether independent claims 1, 8, 14, and 20 are unpatentable under 35 U.S.C. 103(a) as obvious over U.S. Patent Nr. 6,072,877 ("Abel") in view of U.S. Patent Nr. 5,771,294 ("Inoue"), and further in view of U.S. Patent No. 6,792,114 ("Kates")

Argument

In the Final Office Action the Examiner rejects independent claims 1, 8, 14, and 20 as obvious over the proposed combination of references listed above. With respect to independent claims 8, 14, and 20 the Examiner states: "Claim 8 has been analyzed and rejected according to claim 1. Claim 14, has been analyzed and rejected according to claim 1. Claim 20 has been analyzed and rejected according to claim 1." This is a clear abuse of the Examiner's discretion. Independent claim 1 contains different elements than do independent claim 8, 14, and 20. For example, independent claim 1

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requires determining a general response from the warped room acoustical responses, claim 8 does not. In addition, independent claim 14 contains "means for" elements which the Examiner never addresses. Further, independent claim 20 contains elements that require clustering each of the warped room acoustical responses, wherein each cluster contains a centroid. The Examiner dropped the rejection asserted in the prior office action to claim 20 and now merely asserts that claim 20 has been analyzed and rejected according to claim 1. See *Office Action* January 10, 2008 where the Examiner asserted that averaging was equated to both clustering and a centroid. See also *Final Office Action* Dated July 09, 2008 where this assertion has been dropped.

With respect to claim 1 The Examiner's characterization of the scope and contents of the art are erroneous. In rejecting claim 1 the Examiner states that "Abel discloses a method for correcting room acoustics by warping each of the room acoustical response measured at said each listener position (fig. 7a: 121); determining a general response by computing a weighted average room acoustical responses (fig. 10: 74; col. 10, lines 11-14), generating a low order spectral model of the general response (fig. 10: 74; col. 30-36); obtaining a warped acoustic correction filter from the low order spectral model (fig. 10:75) unwarping (fig. 7a: 129) the warped acoustic correction filter."

At a minimum this assertion is also a mischaracterization of the elements "determining a general response by computing a weighted average of the warped room acoustical responses at multiple-listener positions"; "generating a low order spectral model of the general response" and "obtaining a warped acoustic correction filter from the low order spectral model". Abel (fig. 10: 74; col. 10, lines 11-14) states "[w]hen the equalization filter [74] is formed as a weighted average of HRTFs, the weighting should give more importance to longer more complex HRTFs" which the Examiner equates to a general response. Without prejudice to the propriety of this characterization, Abel then teaches that "[a]n input audio signal 73 is applied to an equalizing filter 74 and imaging filter 75 whose transfer function is determined by the applied interpolated equalized HRTF parameters. . . . The filter 75 provides for spatialized audio output suitable for application to one channel of a headphone." [Abel 9: 44-51; FIG. 10] The Examiner's attention is further directed to FIG. 10 which illustrates the output of imaging filter 75 going to headphone 77. Imaging filter 75 is therefore not a low order spectral model from which a warped acoustic correction filter is obtained. This is neither taught, suggested, or implied in Abel. This argument was made in Response to Office Action dated April 10, 2008 and has never been addressed by the Examiner.

The Examiner further asserts that "Kates et al discloses a pole-zero model which is an inverse a low order spectral model [sic] (Kates et al., col. 4 lines 5-16). The cited passage of Kates is reiterated here for the Examiner and the Board of Appeals' convenience. "The impulse response of the feedback path can be obtained, for example, by using a periodic maximal-length sequence as the probe and accumulating the corresponding periods of the microphone response. The circular correlation of the microphone response with one period of the excitation will then give the impulse

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response of the feedback path. System identification techniques can then be used to produce an all-zero, all-pole, or pole-zero model of the feedback path from the impulse response. An alternative would be to excite the system with a white noise probe sequence and adapt a set of filter coefficients to produce the model of the feedback path."

While, as Kates notes, system identification techniques are known in the art that can be used to derive a models from an impulse response, nothing in Kates teaches, suggests, or implies anything related to the Examiner's assertion that the pole-zero model of Kates is "an inverse a [of the] low order spectral model." Further, there is nothing in Kates that indicates that the pole-zero model can be derived from the low order spectral model, which is generated from the general response determined by computing a weighted average of the warped room acoustical responses.

In contrast, Kates teaches that the model is related to the feedback path and there is no indication within Kates of the order of the model. Kates further states "FIGS. 4-6 show configurations for performing measurement steps 206 and 306 of FIGS. 2 and 3. FIG. 4 is a block diagram showing a first measurement configuration. The characteristics of the feedback path, which includes the amplifier 404, receiver 406, and microphone 410 along with the acoustic and mechanical feedback 408, can be measured by exciting the system with a probe signal 402 and recording the response 412 at the hearing aid microphone 410." The Examiner must be equating to the general room response. This is simply not supported in the reference.

Further, employing common sense, one of ordinary skill in the art would not be motivated to modify the Abel reference to arrive at the asserted portions of the present invention because the reference does not teach "determining a general response by computing a weighted average of the warped room acoustical responses;" which the Examiner erroneously equates to equalizer 74; "generating a low order spectral model of the general response;" which the Examiner additionally equates to equalizer 74; and "obtaining a warped acoustic correction filter from the low order spectral model, wherein the warped acoustic correction filter is the inverse of the low order spectral model" which the Examiner equates to image filter 75. Abel does teach reducing the length of Head Related Transfer Functions by down sampling (FIG. 4a, 7:43-49) and deriving equalizer 74 from weighted averages of Head Related Transfer Functions (10:12-15). These simply are not the same thing.

The addition of any of the cited references fails to correct this deficiency.

The Examiner's characterizations of the differences between the claims and the prior art are erroneous.

With the mischaracterization of the Abel reference the Examiner asserts that it teaches elements that are simply not present either explicitly or implicitly.

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The proposed combination of the applied reference(s) does not arrive at the claimed subject matter.

Without prejudice to the propriety of combining Abel with Inoue and Kates, the proposed combination, for at least the above reasons does not arrive at the claimed subject matter. Stated more explicitly, the proposed combination fails to teach, suggest or imply "determining a general response by computing a weighted average of the warped room acoustical responses at multiple-listener positions"; "generating a low order spectral model of the general response"; and "obtaining a warped acoustic correction filter from the low order spectral model".

Issue

Whether dependent claims 2-6, 9-12, 18-19, and 21-22 are patently distinct from the cited prior art.

Argument

Dependent claim 2 was not rejected by the Examiner on any basis other than the provisional obviousness type double patenting, as discussed above, this rejection is improper. In rejecting the remaining dependent claims in the application the Examiner relies on the proposed combination of Abel, Inoue, and Kates to teach the limitations of independent claim 1, and with respect to independent claims 8, 14, and 20 the Examiner's only rejection is that they have been analyzed and rejected according to claim 1. As illustrated above, the proposed combination does not render independent claim 1 obvious, nor does the proposed combination render obvious independent claims 8, 14, and 20. The deficiencies noted above are not corrected by any of the further references. It is respectfully submitted that since the independent claims are patently distinct from the cited art, the dependent claims are additionally patentable by virtue of their dependency from patentable claims. See *M.P.E.P.* 2143.03

Respectfully submitted,
HELLER EHRMAN LLP

By: 

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Registration No. 55,462